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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/603,857	06/26/2000	William A. Skinner	FTI "AG"	4206

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EXAMINER

BLOUNT, STEVEN

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 01/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/603857

Applicant(s)

Skinner et al

Examiner

Blount

Group Art Unit

2661

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 11/12/03
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 24 is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 24 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____
 - ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other _____

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DETAILED ACTION

Claim Rejections - 35 U.S.C. § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 24 is rejected under 35 U.S.C. 112 second paragraph for failing to particularly point out and distinctly claim the subject matter which the applicant regards as their invention.

In claim 24, last line, "the opening" lacks antecedent basis. In line 2, the term "cylindrical opening" is found, and it appears that the opening in the last line refers to this, although it could also possibly simply refer to the cylindrical opening on the surface of the work member. (The examiner notes that "the tubular opening" in line 17 lacks technically lacks antecedent basis, but that there is no confusion here as to what applicant means to say).

Claim Rejections - 35 U.S.C. § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 24 is rejected under 35 U.S.C. 103(a) as being obvious over EPO patent 0891007 to Schneck.

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The claim elements are almost entirely found in figure 3, including work member 9, first bushing/tubular part 2 and second bushing/tubular part 1 with flanges on the bushings that contact the work surface. Schneck also teaches, on page 1, lines 19 - 20 of the English translation respectfully provided by applicant, that “the second bushing is insertable into the first bushing from the opposite side of the rail web from which the first bushing is inserted, and is fixable by axial and/or radial deformation”. On page 2, lines 18+, it is stated that the material of cylindrical section 3 is displaced axially and radially.

While it is not *explicitly* stated that this “radial deformation” or “radial displacement” causes “fatigue life enhancing compressive residual stresses in the work member immediately around the opening in the work member”, the examiner believes that the phrase “radial deformation” implies such a “fatigue life enhancing compressive residual stress in the work member”, especially in view of the process of “drawing the expansion mandrel through” (page 1 of the English translation of Schneck) as shown in figure 3; see especially the conical shape of area 12 of the mandrel. In view of this, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the radial deformation in Schneck form “fatigue life enhancing compressive stresses” in order to ensure that the bushings/tubular members are securely held in place in the work member.

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Response to Arguments

2. Applicant's arguments filed have been fully considered but they are not persuasive.

With regard to applicants statement that "there is nothing said (in Schneck) about using "radial expansion of the first and second metal tubular members" "that is sufficient to introduce fatigue life enhancing compressive residual stresses in the work member immediately around the opening in the work member"" , the examiner disagrees, especially in view of the new evidence which was provided in the translation of this patent (see the rejection), and the overall process shown in figure 3 of it. It is further noted that it is well known in the art that drawing mandrels causes compressive stresses of the kind taught in Schneck. See, for example, col 11, lines 49+ of USPN 3949535 to King, Jr.

The applicant has expressed confusion with respect to the examiners noting a "small gap" between what applicant states is "between the end of tubular member 3 and the hollow 8". Actually, the examiner stated on page 2, second line from the bottom, that it was between members 1 and 10. This was discussed because applicant had previously claimed "contiguous the first flange" and "contiguous the second flange". Since these phrases are no longer in the claim, this is no longer an issue. The examiner would like to note, however, that there is nothing at all wrong with stating "this small gap is an obvious variation which would have been known to one skilled in the art", because it is implied in this statement that "this small gap is an obvious variation (to what is claimed) which would have been obvious to one skilled in the art.

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Applicant expresses disagreement about the idea that the bolt members introduce compressive residual stress. In response, the examiner notes that in view of the comments in the translation of Schneck with respect to radial deformation and displacement, consideration of the bolt members participation is no longer essential, but it only buttress the rejection.

Finally, applicant has noted, in the last paragraph, that anticipation requires disclosure in a single prior art reference of every element of the claim under consideration. The examiner notes, however, that no anticipation rejections were made in the previous office action.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Application/Control Number: 09603857

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4. Examiner Blount may be contacted at the Patent Office between the hours of 9:00 am to 5:30 P.M. Monday through Friday. His phone number is (703) 305-0319.

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1/12/04